

REMARKS

Claims 1 - 38 are pending in this application; Claims 1, 2, 4, 5, 8 - 18, and 34 - 38 have been amended in several particulars to overcome the §112 rejection.

In the "final" Office action mailed 26 October 1994 (Paper No. 12), the Examiner (1) allowed claims 23 - 33 over the prior art of record without the necessity of amendments; (2) objected to the drawings; (3) objected to the Abstract and the Disclosure for various minor informalities; (4) rejected claims 1 - 16 and 34 - 38 under 35 USC §112, second paragraph, for being indefinite, and separately rejected claims 10 - 22 under 35 USC §112, second paragraph, for being incomplete.

Since then, two Amendments under 37 CFR §1.116(b) were filed along with a substitute specification on 19 December 1994 and 9 January 1995, respectively. Although the Examiner has indicated allowability of claims 1, 3, 4, 6 - 8, 17 and 34 - 38, as previously amended, over the prior art of record without the necessity for amendments, and withdrawn (1) the objection to FIG. 3 for not being labeled as "Prior Art;" (2) the objection to the specification for containing numerous grammatical errors, the Abstract of the Disclosure for using the word "means," and the Disclosure for failing to discuss FIGs. 1 - 3 in the "background of the invention" section as specified under MPEP §608.01(d) in view of the filing of the substitute specification on 19 December 1994, he has nevertheless maintained the rejection of claims 2, 5, 9 - 16 and 18 - 22

under 35 USC §112, second paragraph, for being indefinite in several instances.

Accordingly, the same proposed amendments to claims 1, 3, 4, 6 – 8, 17 and 34 – 38 are hereby submitted so as to place these claims in condition for allowance. Similarly, a substitute specification with cross-reference to related applications claimed under 35 USC §119 is hereby resubmitted for convenient and entry so as to avoid the objections to the Abstract and the Disclosure for various minor informalities.

Consequently, the remaining issue in this application is the rejection of claims 2, 5, 9 – 16, 18 – 22 under 35 U.S.C. §112, **second** paragraph as is noted in the Advisory action (Paper No. 17). Actually, the only issue is the rejection of claims 9 and 10 under 35 U.S.C. §112, **second** paragraph. The rejection of claims 2, 5, 11 – 16, and 19 – 22 was necessitated by Applicant's Amendment after final. Claims 2, 5, 11 – 16, and 19 – 22 have, however, been carefully reviewed, and amended where needed to avoid all possible §112 issues in order to place themselves in condition to be passed to issue.

Specifically, claim 2 has been amended to provide proper antecedent basis for the term "successive field periods" and clarify the conversion of the "first data read from said memory means into the columns of said second data." Claim 5 has been amended to clarify the printing operation of different colors of the second data sequentially rather than successively. Support for the amendments to claim 5 can be found in lines 14 – 15, page 6 of the substitute

specification, or lines 10 – 11, page 6 of the originally filed specification. Consequently, claims 2 and 5 are believed to be condition for allowance. Should the Examiner insist that claims 2 and 5 continue to suffer §112 problems, he is respectfully requested to telephone Applicant's undersigned attorney so that the prosecution of the application could be promptly concluded without further delay.

With regard to claims 9 and 10, although the Examiner has noted in the Advisory action (Paper No. 17) that Applicant's amendments to these claims raised new §112 issues, Applicant has, however, reviewed claims 9 and 10, and believes that claims 9 and 10 are in fact free of any form of ambiguities.

Specifically, in the "final" Office action (Paper No. 12), the Examiner rejected claim 9 under 35 USC §112, second paragraph because the:

**"means for storing ..., reading ..., accommodating ..., applying ...,
and enabling ..."**

is found to be indefinite since "it is not supported by recitation in the claim of sufficient structure to accomplish the function." Actually, there is no basis under 35 USC §112 to support this rejection. The above means refers to the "data converting means" particularly shown in either FIG. 5 or FIG. 6, and is fully supported by the specification. The word "accommodating" is neither vague nor indefinite as is evidently defined by the Webster's New World Dictionary as "ready to help" or "obliging." The "data converting means" as shown in FIGs. 5 and 6 and

defined in claim 9 does not print column units of video data stored in an internal memory, but accommodates and enables the printer to print the column units of video data stored in the internal memory. In all events, however, for the purpose of concluding prosecution of the instant application, claim 9 has been amended where necessary to avoid the phrases of "accommodating" and "enabling" in order to render this rejection moot.

Additionally, claim 9 has been amended to further define the relationship between the storing of video data in an internal memory, the reading of column units of the video data stored in the internal memory during a synchronizing and equalizing pulse period within a blanking interval of a field period, (see FIG. 8B for support) and the displaying of field units of the video data on a variable visual image during a remainder of said field period that excludes the blanking interval. (see FIG. 8E for support). Claim 9 has also been amended to further define the reading of video data from the internal memory by the "selection means" and the storing of video data in the "line memory means" as being performed during the synchronizing and equalizing pulse period, (see FIG. 8C for support) and the printing of the video data provided from the "line memory means" as being performed during a remainder of said field period that excludes said synchronizing and equalizing pulse period, (see FIG. 8D for support).

Claim 9, as amended, is narrower in scope of coverage than the one conditionally allowed by the Examiner; consequently, it is believed to be in condition for allowance. Should the Examiner continue to reject claim 9 under 35 USC §112, he is respectfully requested to telephone

Applicant's undersigned attorney to conclude prosecution of the application without further delay; there is no reason for the Examiner to continue delaying prosecution of the application when all pending claims 1 – 38 are allowable over the prior art. Accordingly, the Examiner's cooperation in concluding prosecution of the instant application is respectfully solicited.

Similarly, with regard to claim 10, there is no basis for the Examiner to continue rejecting claim 10 under 35 U.S.C. §112, **second** paragraph. In the "final" Office action (Paper No. 12), the Examiner asserted that:

"the recitation of more than one function for the data conversion means makes the structure indefinite since it is not clear what part of the data conversion means is performing each of the 2 different functions."

This assertion is, however, in error for the following reasons.

First, claim 10 is written in a means-plus-function format as is permitted under 35 USC §112, **sixth** paragraph; consequently, "the recitation of more than one function for the data conversion means" does not make the structure indefinite because the claim does not specify or refer to the structure.

Second, Applicant is not obligated under 35 USC §112, **sixth** paragraph to specify what part of the "data conversion means" perform each of the two different functions of "storing said color video data in an internal memory" and "selectively reading said color video data stored in said internal memory." 35 USC §112, **sixth** paragraph expressly mandates:

"An element in a claim for a combination may be expressed as a means or step for performing *a specified function without the recital of structure, material, or acts in support thereof*, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof."

The statute simply does not prohibit the drafter of claims to draft the "data conversion means" to perform only one specified function, but instead allows for a "*specified function without the recital of structure, material, or acts in support thereof*." The specified function of the "data conversion means" as recited in claim 10 is again the "**storing** said color video data in an internal memory ... and **selectively reading** said color video data stored in said internal memory in columns corresponding to pixels of a raster scan of an interlaced video field." These two functions are clearly supported by the specification as part of the "data conversion means." Specifically, the Examiner's attention is directed to FIG. 6 where the detailed circuit configuration of the data conversion means is shown as comprising a plurality of memories 88a, 88b, 88c used to store different colors of the video data, and an output switch 86 used to selectively read the color video data stored in the memories 88a, 88b, 88c for subsequent storage in a line memory 68. Since the two functions of the "data conversion means" are fully supported by the specification, their recitation in claim 10 is entirely permissible within the purview of 35 USC §112, six paragraph.

To demonstrate the practice of writing a single means in a means-plus-function format as comprising more than one function, the Examiner's attention is directed to *In re Kelley*, 134

USPQ 397, where the Court stated that:

"We see no reason why a single structural element....which performs two separate functions, cannot support a claim reciting broadly these separate functions,"

as long as the functions are different and are supported by the specification. See also *Palmer v. United States*, 163 USPQ 250. The vitality of *In re Kelley* is evident in the allowed claims in the Examiner's cited U.S. Patent No. 5,291,313 issued to Kim, U.S. Patent No. 5,216,514 issued to Hong et al., U.S. Patent No. 5,115,320 issued to Ebihara et al.

Specifically, the Examiner's attention is directed to the issued claim 1 of the Kim patent which requires "microcomputer means" to perform more than two functions (*i.e.*, **for calculating** an average value ... **for comparing** said average value with a predetermined value ... and for switchably connecting ...)

Similarly, claim 1 of the Hong patent also calls for "video processor means" for performing a first function, *i.e.*, "processing an input video signal" and for performing a second function, *i.e.*, "selectively generating an output"). Consequently, in view of the above, there is no statutory basis for the Examiner to maintain this rejection.

As for the assertion that the phrases "said recording address generating means" and "said printing address generating means" contained in claim 10 lack proper antecedent basis, claim 10 has been amended to delete these phrases to render this rejection moot.

As for the assertion that:

"it is not clear where the printing signal is coming from, or what element is doing the printing in response to the printing signal."

This assertion is also moot because claim 10 had already been amended in Applicant's previous Amendment under 37 CFR §1.116(b) to include an additional printer means for performing the printing. The additional printer means is hereby resubmitted for entry to obviate this rejection. Consequently, this rejection should be withdrawn. Again, should the Examiner believe that claim 10 suffers additional §112 problems, he is respectfully requested to telephone Applicant's undersigned attorney in order to promptly conclude prosecution of the instant application.

With regard to claims 11 – 16 and 19 – 22, these claims have been carefully reviewed and confirmed that they are in fact definite so as to avoid any potential §112 problems. Specifically, claim 18 has been amended to clarify the relationship between the "internal memory means," "recording address generating means," "printing address generating means," "monitoring address generating means," and "address selector means" as shown in FIGs. 5 and 6. Consequently, claim 18 is believed to be in condition for allowance. Again, should the Examiner believe otherwise, he is respectfully requested to point them out to Applicant as is mandated under MPEP §707.07(d).

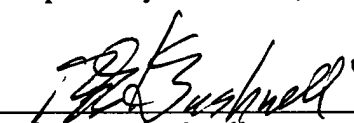
In summary, Applicant believes that all pending claims 1 – 38 are now in condition to be passed to issuance. All rejections under 35 USC §112, second paragraph, should be withdrawn.

Although entry of Applicant's previous filed Amendment under 37 CFR §1.116(b) filed on 19 December 1994 is appreciated, in view of the outstanding §112 issues, Applicant respectfully requests the Examiner to enter the foregoing amendments in substitution of the previously filed Amendment so as to conclude prosecution of the instant application on the merits. Entry of the foregoing amendments is believed to be proper under 37 C.F.R. §1.116(b) because those amendments simply respond to the issues raised in the final rejection, no new issues are raised, no further search is required, and the foregoing amendments are believed to remove the basis of the outstanding rejections and to place all claims in condition for allowance. The foregoing amendments, or explanations, could not have been made earlier because these issues had not previously been raised.

A Petition for a one month's Extension of Time in which to respond to the outstanding Office action, to and through at least 9 February 1995, and the incurred fee, accompanies this response. Should the Petition become lost or otherwise separated from this response, the Examiner is requested to treat this response as the original Petition.

In view of the foregoing amendments, arguments and remarks, all claims are deemed to be allowable and this application is believed to be in condition to be passed to issue. Should any questions remain unresolved, the Examiner is requested to telephone Applicant's attorney.

Respectfully submitted,


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